SANTA MONICA BAY RESTORATION COMMITTEE (SMBRC) TECHNICAL ADVISORY COMMITTEE

STATEMENT OF QUALIFICATIONS

The Sanitation Districts of Los Angeles County (Districts) have continuously implemented an extensive marine and freshwater receiving water monitoring program in and around the Palos Verdes peninsula and the San Gabriel and Santa Clara River watersheds since 1970. The Districts currently own, operate, and staff a 66 foot research vessel, the Ocean Sentinel and a 28 foot vessel, the Phaon. These vessels are docked in San Pedro and are dedicated for coastal monitoring research that includes collection of sediment, water column samples, and ecological data for chemical, toxicological, and biological analyses. The Districts also maintain a staff of biologists, microbiologists, chemists, and scientists to provide taxonomic, contaminant concentration, toxicological, and analytical expertise. In the upstream watersheds, the Districts provide benthic invertebrate, algal, toxicological, microbiological, and chemical expertise associated with various watershed programs including regional watershed monitoring and Stormwater Monitoring Coalition efforts. In the coastal receiving waters, we have and continue to work with and support numerous efforts and monitoring programs including those of the SMBRC, USEPA, USGS, OEEHA, CADFW, and the Bight Surveys. A non-inclusive list of specific projects and expertise involving Districts staff include fish tissue contaminant concentration monitoring, legacy pollutant monitoring supporting USEPA superfund efforts, sediment infauna assessments, ichthyoplankton monitoring, ocean acidification research, causal assessments associated with impaired biological endpoints, kelp bed monitoring, and shoreline and near shore bacteriological monitoring.

Individually, Philip Markle has a B.S. in Marine Biology from CSU Long Beach and an M.S. in Environmental Management from the University of San Francisco. He has over 20 years experience as an environmental toxicologist and over ten years managing and overseeing the Districts' inland watershed-wide receiving monitoring efforts. He has collaborated and worked with regional, state and federal regulators on technical and policy implementation as it relates to watershed monitoring, freshwater bioassessment invertebrate, fish, and algae index development, TMDL implementation, toxicity testing and is a Board Certified Environmental Scientist through the American Academy of Environmental Engineers and Scientists (AAEES). He has served on the Society of Environmental Toxicology and Chemistry (SETAC) Regional Board of Directors and on several expert advisory panels and committees for SETAC North America.